Return to Work: Helping Survivors of Brain Injury Manage Cognitive Challenges

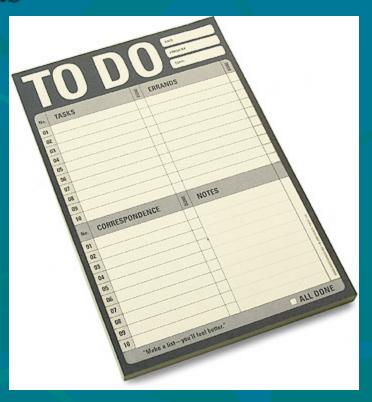
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Outline

- Cognitive Linguistic Deficits: An Overview
- Attention / Concentration Deficits
 - Strategies to Maximize Function
- Memory Deficits
 - Strategies to Maximize Function
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 - Strategies to Maximize Function
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 - Strategies to Maximize Function
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- Questions



Cognition: A Conceptual Framework

■ It's not perfect...but it's a start.



What are attention deficits?

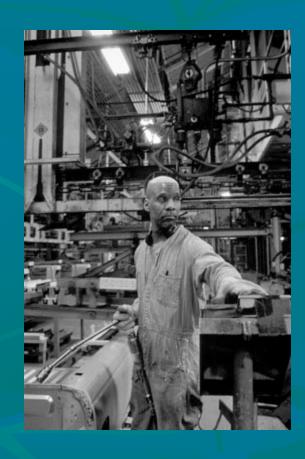
- Attention is the most basic cognitive function and is the one on which most other cognitive functions are based.
- There are many different types of attention:
 - **Focused attention:** This is the ability to respond discretely to specific visual, auditory or tactile stimuli.
 - **Sustained attention:** This refers to the ability to maintain a consistent behavioral response during continuous and repetitive activity.
 - **Selective attention:** This level of attention refers to the capacity to maintain a behavioral or cognitive set in the face of distracting or competing stimuli. Therefore it incorporates the notion of "freedom from distractibility"
 - **Alternating attention:** it refers to the capacity for mental flexibility that allows individuals to shift their focus of attention and move between tasks having different cognitive requirements.
 - **Divided attention:** This is the highest level of attention and it refers to the ability to respond simultaneously to multiple tasks or multiple task demands.





Attention Deficits and Job Performance

- A worker with a very simple clerical job constantly stops working to watch or listen to others.
- An employee cannot handle a routine job assembling machine parts because of his busy surroundings.
- A teacher, hoping to return to his job, finds himself unable to read and concentrate in the midst of typical noise.



Attention Deficits: Strategies to Maximize Function

- Help the employee to unclutter his work area to lessen distractions.
- Isolate the employee from as much visual and auditory distraction as possible.
- With the employee's agreement, perhaps an understanding supervisor or co-worker could give a "sign" to the employee when he seems to have wandered off task.





What are memory deficits?

- Encompass a survivor's ability to retain information (visual, auditory)
- There are many classifications of memory (too many to go through without boring you to death...so we'll keep things a little more basic)
 - Immediate memory
 - Short term (working) memory
 - Long term memory



What are memory deficits (con't)?

- Short term memory deficits are the most common memory impairments following damage to the brain.
- Generally thought to enable us to use information from our senses and from our memory and hold that information in our consciousness long enough to think about it.



Memory Deficits and Job Performance

- The employee may show up at the wrong time on the wrong day for his part-time job.
- A supply clerk may be unable to fill warehouse orders because he cannot remember the location of items.
- The employee may not call new people he meets by their first name because he does not recall their names.
- The employee may avoid answering the telephone for fear of making erors and may be embarrassed to ask for the caller to repeat himself.





Memory Deficits: Strategies to Maximize Function

- Be aware of the employee's compensation (i.e. notebook, calendar, watch alarm, voice recorder) techniques and encourage him to use them.
- When giving or requesting information from the employee, do so in writing as well as verbally.
- Provide as many environmental aids as possible to assist in memory for location of items, appointments, and schedules (labeling items, bulletin boards, calendars).

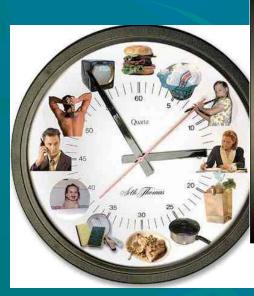


What are executive functions?

- The executive in a company is the person who sets goals and determines their feasibility. The executive's responsibility is to plan out how the resources of the company will be used and decide what the priorities are. She or he decides what direction things will take in the long term. When there are conflicting reports or demands, the executive decides what to do about it. In a word, the executive's responsibility is to think about things, look at the big picture, and plan for the future.
- In the brain, a large part of what the frontal areas do is executive functioning. They are the parts of the brain that decide the big issues like "what are my goals?" "what are the steps to reach the goals?" "are they attainable?" "do I have the skills necessary to meet the goals?"

What are executive functions (con't)?

- Executive functions are defined differently by different professional groups. Skills involved are generally thought to include:
 - Insight
 - Planning
 - Sequencing
 - Initiation
 - Self monitoring
 - Judgment
 - Problem solving
 - Reasoning





How do executive function deficits affect the survivor?

- When the survivor lacks insight, problem solving, planning and reasoning, the primary results are reduced independence and risk to personal and public safety.
- Executive functioning deficits are also at least partially responsible for the loss of relationships.



Executive Functions and Job Performance

- Executive functions are particularly important in the following situations:
 - Those that involve planning or decision making.
 - Those that involve error correction or troubleshooting.
 - Situations where responses are not well-learned or contain novel sequences of actions.
 - Dangerous or technically difficult situations.
 - Situations which require the overcoming of a strong habitual response or resisting temptation.

Problem Solving Deficits

- A construction worker may take unnecessary risks on the work site in order to complete his share of the work
- A trial lawyer may not be able to return to that aspect of law because he may no longer be ale to "think on his feet."
- A once efficient secretary may experience considerable difficulty managing her duties and responsibilities, thus requiring her to either work overtime or not complete a day's work



- For safety reasons, be aware of the possibility of problem solving difficulties in the employee
- If it suits both of your needs, remove the time restraints from certain job-related tasks.
- Respect the employee's awareness of limitations and accommodate change of responsibilities if at all possible.



Initiation Deficits

- After being told his old job is no longer available, the former employee makes no alternative plan for work.
- The former employee talks and dreams of plans for money from his lawsuit, thus making no plans for returning to work.
- The employee may give you a listing of accounts, with all monies owed, but does not make any telephone calls to collect.
- The employee can verbally outline for you the next project, but will not take the first step toward beginning the project.

- Establish a set of time lines for completion of work tasks.
- Attempt to assign a series of small tasks, one at a time, in lieu of one big project.







Cognitive Inflexibility

- Having once been a supervisor, the employee begins to instruct and criticize others his first day on the new job.
- A secretary has difficulty because her job requires three to four different tasks during the day. She is not able to change tasks.
- The employee may become involved in an altercation with another employee because he perceives the job must be done in only one way.
- The employee loses his job because "no one would listen and do it his way."

- Define job role and expectations upon hiring. Explain the organization structure and chain of command for grievances. Make it clear to the employee how he fits into the organizational structure.
- If at all possible, structure the job so that it does not include numerous small divergent tasks, but rather a series of well defined related tasks.
- Attempt to steer this employee clear of potential high pressure and controversial situations.



Disorganization and Sequencing Deficits

- A cashier who must carry out a number of steps in sequence finds the tasks very stressful.
- A receptionist has difficulty giving directions to visitors.
- A laborer who must activate a piece of equipment with a series of steps is often frustrated and delayed by confusing or omitting steps.
- A construction worker may be unable to install a basic lock set because he did not read the instructions before starting the task.
- The once efficient bookkeeper is unable to find important files because they have been misplaced.
- A teacher who prides herself on being organized becomes frustrated with herself because of clutter and lack of plans.





- Frustration and errors can be lessened by having step-by-step directions written in concise terms for use as a checklist.
- Maps / diagrams may be useful in certain positions. Many times visual aids prove very helpful, especially when combined with auditory instructions or physical movement.
- Recognize the compensatory behaviors of lists, calendars, and post-it notes and encourage the employee to use them.
- Maintain a sense of organization and order around the work environment.
- Recognize the fact that organization is a higher level cognitive function, and that breakdown in any of those skills (i.e memory, sequencing, problem solving) may lead to organizational difficulties.



Behavioral Challenges

- Some of the most challenging aspects of working with the brain injury survivor revolve around various behavioral issues. Following brain injury any combination of the following may be noted:
 - Agitation and low frustration tolerance
 - Verbal / physical outbursts
 - Egocentrism
 - Emotional lability
 - Paranoia
 - Difficulty in social situations
 - (survivor may appear socially immature)
 - Fatigue



Behavioral Challenges and Job Performance

Agitation

- The employee taps his pencil incessantly during a meeting.
 - Perseveration is a sign of agitation, so finger drumming, pacing, foot tapping, or any other repetitive behavior may occur during activity lulls.
- The employee may rapidly or continuously verbalize the same thought or idea.
- The employee may shuffle and reshuffle papers purposelessly.
- The employee may spend excessive time preparing for a project, thus avoiding the task and anxiety associated with beginning the task.



- Don't subject the employee to long waiting periods
- Excuse the employee from meetings, workshops, etc. that require him to sit quietly for long periods of time
- Vary the employee's work activity when he gets bored with one activity; if he is on task with an activity and performing well in it, don't interrupt him or divert his attention.
- Don't initially assign him to a project that will present obstacles. For example, if his part of the job depends on somebody else, doing something first, be sure the other person will have done his part in a timely manner.
- Schedule more frequent breaks. Encourage physical activity during break times
- Allow time to do exercise and relaxation techniques
- Allow the employee to make decisions regarding minor issues (e.g., location of desk, wearing apparel, timing of breaks).
- Rules that are enforced for the sake of uniformity probably need to be adapted (modified lunch time, etc.)

Case Study: Barry TBI secondary to a fall

Strengths	Barriers
17 years of construction	Reduced short term
experience / self employed	memory
Work motivated	Could not return to field because of inability to work on heights
Solid work history	Difficulty learning new tasks
Outgoing personality	Easily distracted
Good physical strength	Tires easily
Great humor	Feelings of no self worth
Strong work ethic	No driver's license

Case Study: Mark TBI from Motorcycle Accident

Strengths	Barriers
15 years on the job	Reduced short term
	memory
Intact long term memory	Low stamina
Support of physicians	Emotional lability
Support of local union	Driver's license revoked
Acceptance of services	No time awareness
	Employer fears
	No family support

Case Study: Larry Brain Abscess from Pulling own Tooth

Strengths	Barriers
Strong work ethic	Limited vision (tunnel vision)
Good physical strength	Short term memory deficit
Friendlygets along well with others	Orientation deficit
Outstanding work history	Depression
Good visual memory	No transportation

Case Study: Rob TBI from Motor Vehicle Accident

Strengths	Barriers
Outgoing	Limited work history
Excellent grooming	Inability to drive and no public transportation
Strong educational background	No routine in daily life
Strong family support	Excessive use of tobacco chew
Work motivated	Excessive use of caffeine
Financially motivated	Refusal to take directions from females
Open to entry level jobs	Previous assessment report

Questions



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